Deploy Strategy

This deployment strategy aims to guide the successful deployment of a frontend and backend separated project based on Vue.js and Spring Boot onto an Alibaba Cloud server. In the preparation phase, ensure the server environment readiness by installing necessary software and tools and verifying successful connections. During the project development and debugging phase, execute database table creation and ensure smooth running of the frontend and backend projects in the local environment. Subsequently, proceed with project packaging, including building and packaging the frontend and backend projects separately. Finally, in the deployment phase, use FTP tools to upload the packaged frontend resources and the executable JAR file of the backend to the server and start the backend project. The entire deployment process covers comprehensive steps from preparation to packaging and deployment, ensuring the smooth operation of the project on the server.

Preparation

1. Alibaba Cloud Server .
2. Install Xshell and Xftp connection tools and successfully connect to the server.
3. Install JDK, MySQL, Redis, Tomcat, Nginx, and other environments on the server, ensuring successful installation.
4. After successful installation of MySQL, use Navicat connection tool to connect to MySQL on the server.
5. After successful installation of Redis, use RedisDesktopManager connection tool to connect to Redis on the server.

Project Development and Debugging

1. Execute SQL script to create tables on the server's MySQL.
2. Modify MySQL connection configuration. Modify the configuration file application.yml with MySQL database URL, username, and password to match your actual server database configuration.
3. Modify Redis connection configuration. Modify Redis cache host, password, and other connection information to match your actual server Redis configuration.
4. Run tests locally. Start the front-end and back-end projects to ensure successful project execution.

Project Packaging

1. Front-end project build and packaging. Navigate to the project's root directory and execute the following command.
2. Back-end project build and packaging. For convenience, Spring Boot comes with an embedded Tomcat application server, and the project is by default packaged as an executable JAR file. Navigate to the project's root directory and execute the `mvn package` command to build and package. The executable JAR file will be located in the target folder upon completion.

Project Deployment

1. Front-end deployment. Use Xftp tool to upload the packaged dist folder of the front-end to the /usr/local/web directory on the server.
2. Back-end deployment. Use Xftp tool to upload the packaged JAR file to the /usr/local/web directory on the server. Start the back-end project in the background.